

The CBHSQ Report

Short Report

August 29, 2013*

A DAY IN THE LIFE OF AMERICAN ADOLESCENTS: SUBSTANCE USE FACTS UPDATE

AUTHORS

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INTRODUCTION

In the United States in 2011, there were an estimated 25.1 million adolescents aged 12 to 17.¹ In the past year, more than one quarter of adolescents drank alcohol, approximately one fifth used an illicit drug, and almost one eighth smoked cigarettes.² Although the percentage of adolescents using alcohol, cigarettes, and illicit drugs declined between 2008 and 2011, the percentage of persons aged 12 to 17 receiving substance abuse treatment remained relatively stable.³ In addition, the number of adolescents seen in an emergency department (ED) for the use of illicit drugs and the misuse or abuse of pharmaceuticals remained stable from 2004 to 2011.⁴ In 2010, 7.3 percent of all persons admitted to publicly funded treatment facilities were aged 12 to 17.⁵

The Center for Behavioral Health Statistics and Quality (CBHSQ) in the Substance Abuse and Mental Health Services Administration (SAMHSA) collects, analyzes, and disseminates critical public health data. CBHSQ manages four national data collections that offer insight into adolescent substance use and treatment: the National Survey on Drug Use and Health (NSDUH), the Treatment Episode Data Set (TEDS), the National Survey of Substance Abuse Treatment Services (N-SSATS), and the Drug Abuse Warning Network (DAWN).^{6,7,8,9}

This *CBHSQ Report* presents facts about adolescent substance use, including initiation, receipt of treatment, and emergency department visits for substance use “on an average or typical day.”¹⁰ Data in this report from NSDUH, TEDS, and DAWN are for adolescents aged 12 to 17; data from N-SSATS are for youths aged 17 or younger.



In Brief

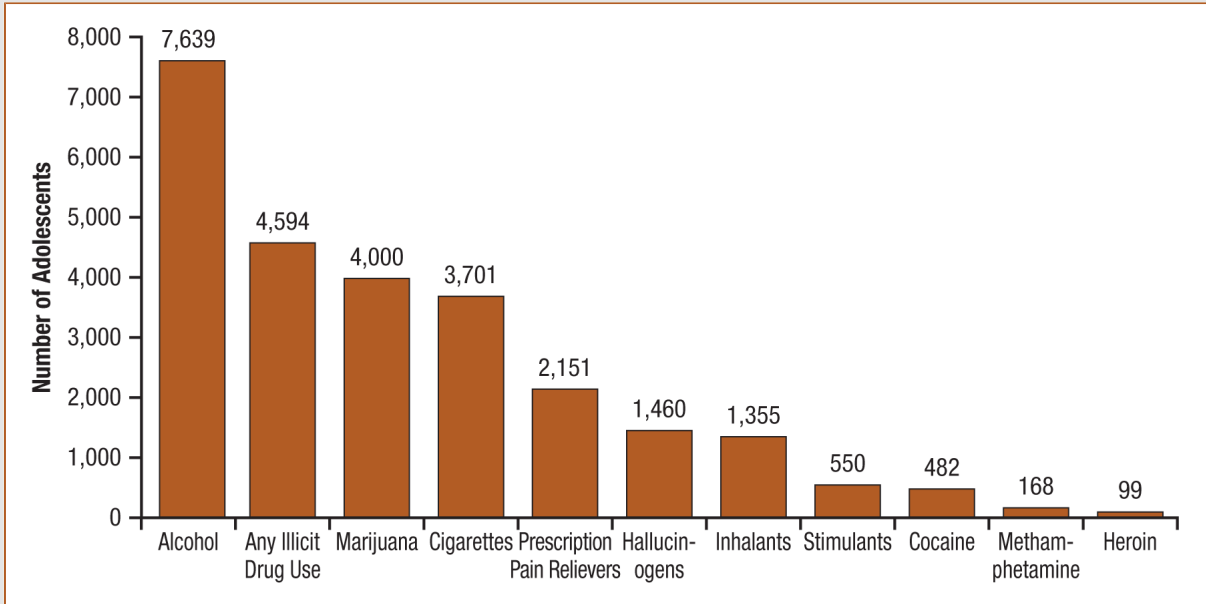
- This *CBHSQ Report* presents facts about adolescent substance use, including information on the initiation of substance use, past year substance use, emergency department visits, and receipt of substance use treatment
- The data presented are from the 2010 and 2011 National Surveys on Drug Use and Health (NSDUHs), the 2010 Treatment Episode Data Set (TEDS), the 2010 National Survey of Substance Abuse Treatment Services (N-SSATS), and the 2011 Drug Abuse Warning Network (DAWN)

FIRST SUBSTANCE USE

According to combined 2010 and 2011 NSDUH data, 10.3 percent of adolescents aged 12 to 17 drank alcohol for the first time in the past year, and 6.3 percent used an illicit drug¹¹ for the first time. The combined 2010 and 2011 NSDUH data indicate that, on an average day¹⁰ during the past year, the following numbers of adolescents used the indicated substances for the first time (Figure 1):

- 7,639 drank alcohol;
- 4,594 used an illicit drug;
- 4,000 used marijuana;
- 3,701 smoked cigarettes;
- 2,151 used prescription pain relievers nonmedically;
- 1,460 used hallucinogens;
- 1,355 used inhalants;
- 550 used licit or illicit stimulants nonmedically;
- 482 used cocaine;
- 168 used methamphetamine; and
- 99 used heroin.

Figure 1. Number of Adolescents Aged 12 to 17 Who Used Cigarettes, Alcohol, or Illicit Drugs for the First Time on an Average Day: 2010 and 2011 NSDUHs



Source: 2010 and 2011 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

CIGARETTE, ALCOHOL, AND ILLICIT DRUG USE

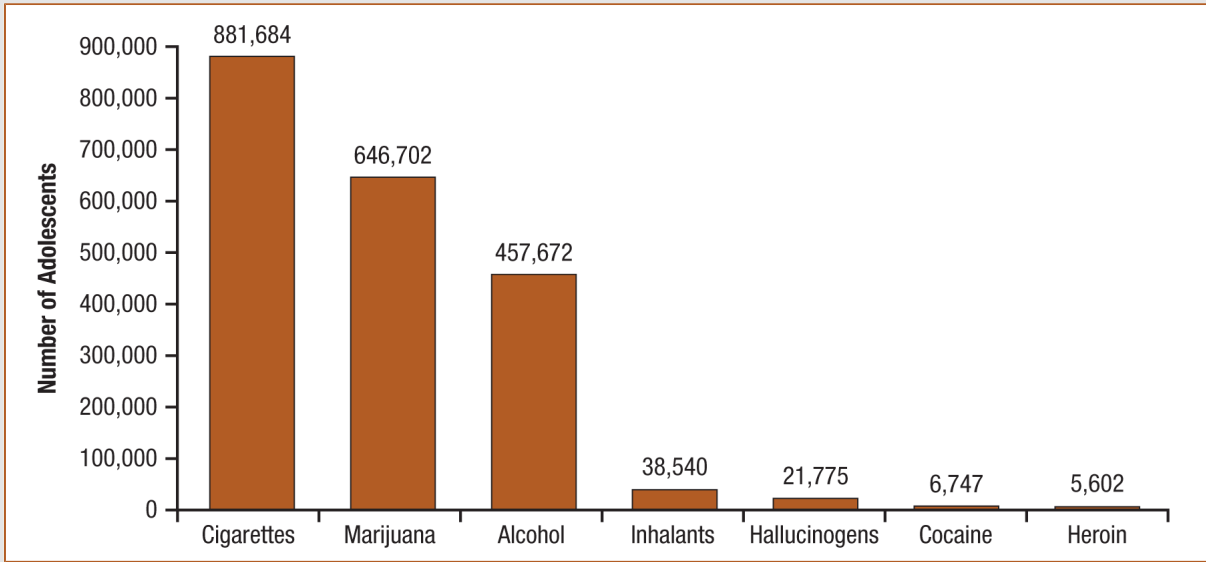
According to combined 2010 and 2011 NSDUH data, in the past year, nearly 7 million adolescents aged 12 to 17 drank alcohol, nearly 5 million used an illicit drug, and 3 million smoked cigarettes. In addition, on an average day during the past year, adolescents aged 12 to 17 used the following substances (Figure 2):

- 881,684 smoked cigarettes;
- 646,702 used marijuana;
- 457,672 drank alcohol;
- 38,540 used inhalants;
- 21,775 used hallucinogens;
- 6,747 used cocaine; and
- 5,602 used heroin.

The combined 2010 and 2011 NSDUH data indicate that:

- adolescents who used alcohol in the past month drank an average of 4.3 drinks per day on the days they drank, and
- adolescents who smoked cigarettes in the past month smoked an average of 3.9 cigarettes per day on the days they smoked.

Figure 2. Number of Adolescents Aged 12 to 17 Who Used Cigarettes, Alcohol, or Illicit Drugs on an Average Day: 2010 and 2011 NSDUHs



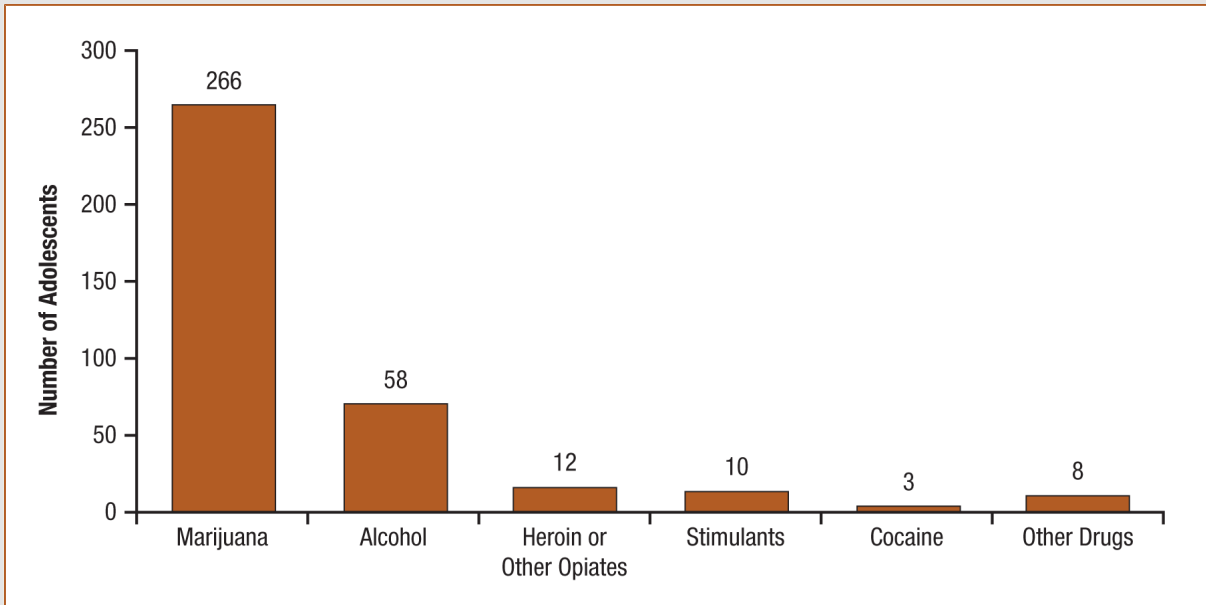
Source: 2010 and 2011 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

SUBSTANCE ABUSE TREATMENT

TEDS reported that there were 132,850 admissions for adolescents aged 12 to 17 to substance abuse treatment programs in 2010 (TEDS data come primarily from facilities that receive some public funding). TEDS indicates that, on a typical day¹⁰ in 2010, adolescent admissions to treatment reported the following primary substances of abuse¹² (Figure 3):

- 266 reported marijuana;
- 58 reported alcohol;
- 12 reported heroin or other opiates;
- 10 reported stimulants;
- 3 reported cocaine; and
- 8 reported other drugs.

Figure 3. Number of Adolescents Aged 12 to 17 Admitted to Publicly Funded Substance Abuse Treatment Facilities on a Typical Day, by Primary Substance of Abuse: 2010 TEDS

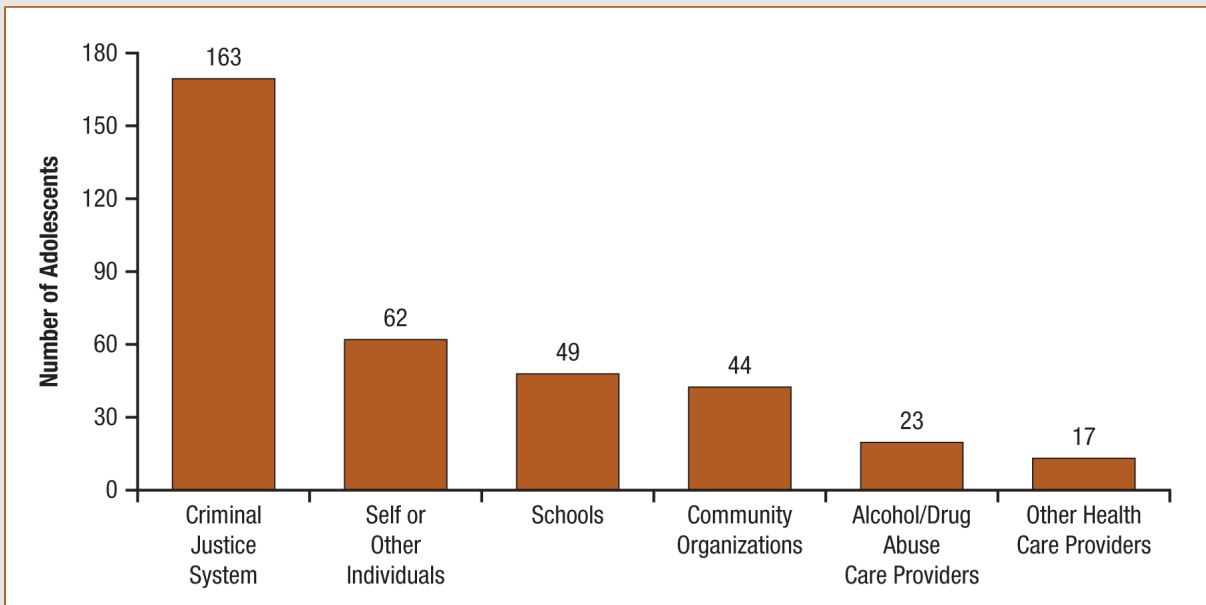


Source: 2010 SAMHSA Treatment Episode Data Set (TEDS).

TEDS indicates that, on a typical day in 2010, adolescent admissions to substance abuse treatment were referred principally by the following sources¹³ (Figure 4):

- 163 by the criminal justice system;
- 62 by self-referral or referral from other individuals;
- 49 by schools;
- 44 by community organizations;
- 23 by alcohol/drug abuse care providers; and
- 17 by other health care providers.

Figure 4. Number of Adolescents Aged 12 to 17 Admitted to Publicly Funded Substance Abuse Treatment Facilities on a Typical Day, by Principal Source of Referral: 2010 TEDS

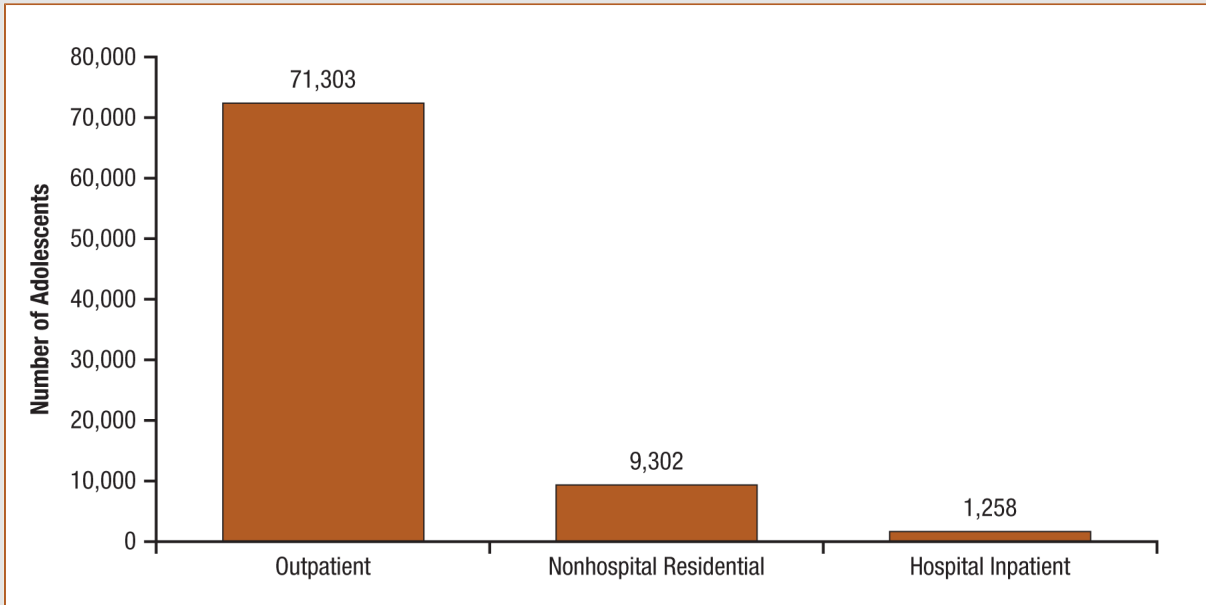


Source: 2010 SAMHSA Treatment Episode Data Set (TEDS).

In addition, N-SSATS, which collects information on substance abuse treatment at both publicly and privately funded facilities, reports how many active clients¹⁴ aged 17 or younger received the following types of substance abuse treatment on a typical day in 2010 (Figure 5):

- 71,303 were clients in outpatient treatment;
- 9,302 were clients in nonhospital residential treatment; and
- 1,258 were clients in hospital inpatient treatment.

Figure 5. Number of Clients Aged 17 or Younger Who Were Clients in Publicly or Privately Funded Substance Abuse Treatment Facilities on a Typical Day, by Service Type: 2010 N-SSATS



Source: 2010 SAMHSA National Survey of Substance Abuse Treatment Services (N-SSATS).

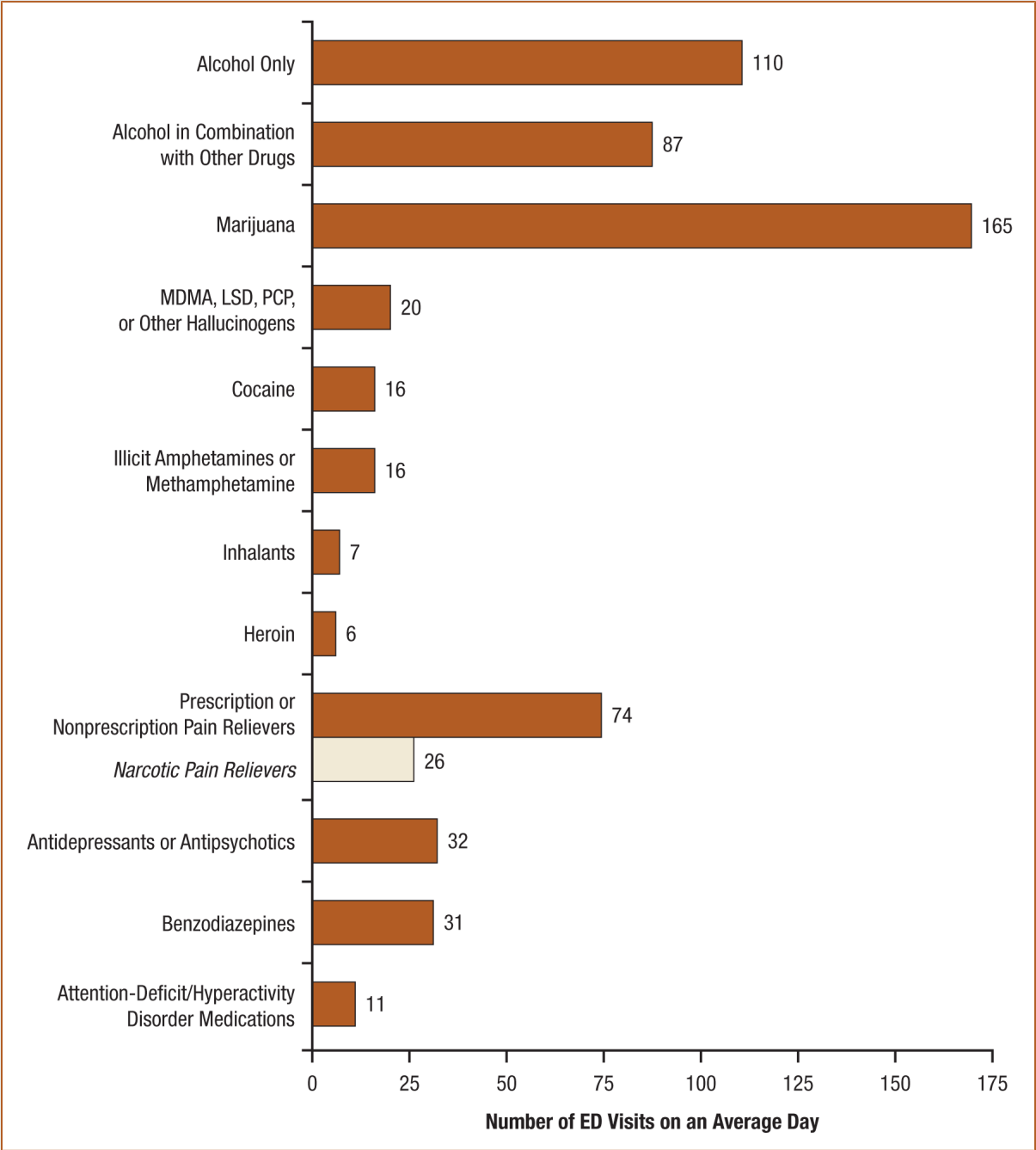
EMERGENCY DEPARTMENT VISITS

DAWN estimates that in 2011 there were about 280,000 drug-related ED visits by adolescents aged 12 to 17, of which 181,005 visits involved the use of illicit drugs, alcohol, or intentional misuse or abuse of pharmaceuticals (e.g., prescription medicines, over-the-counter remedies, and dietary supplements).¹⁵ On a typical day in 2011, there were 777 drug-related ED visits for adolescents aged 12 to 17, of which 496 involved the use of illegal drugs or the misuse or abuse of pharmaceuticals. On a typical day in 2011, the listed substances were involved at the following levels (Figure 6):¹⁶

- 110 involved alcohol only;
- 87 involved alcohol in combination with other drugs;
- 165 involved marijuana;
- 20 involved MDMA (i.e., Ecstasy), LSD, PCP, or other hallucinogens;
- 16 involved cocaine;
- 16 involved illicit amphetamines or methamphetamine;
- 7 involved inhalants;
- 6 involved heroin;
- 74 involved prescription or nonprescription pain relievers, 26 of which involved narcotic pain relievers (e.g., hydrocodone, oxycodone);
- 32 involved antidepressants or antipsychotics;
- 31 involved benzodiazepines; and
- 11 involved attention-deficit/hyperactivity disorder (ADHD) medications.

DAWN estimates that, on any given day in 2011, there were 63 ED visits for drug-related suicide attempts among adolescents.

Figure 6. Number of Emergency Department (ED) Visits for Drug Misuse or Abuse on a Typical Day for Patients Aged 12 to 17, by Selected Types of Drugs: 2011 DAWN



Source: 2010 SAMHSA Drug Abuse Warning Network (DAWN).

SUGGESTED CITATION

Lipari, R.N., Crane, E.H., Strashny, A., and Dean, D. *A Day in the Life of American Adolescents: Substance Use Facts Update*. The CBHSQ Report: August 29, 2013. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Rockville, MD.

END NOTES

1. United States Census Bureau. (2013). *National characteristics: Vintage 2012*. Retrieved from <http://www.census.gov/popest/data/national/asrh/2012/index.html>
2. Center for Behavioral Health Statistics and Quality. (2012). *Results from the 2011 National Survey on Drug Use and Health: Summary of national findings* (NSDUH Series H-44, HHS Publication No. SMA 12-4713). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from <http://www.samhsa.gov/data/NSDUH/2011SummNatFindDetTables/Index.aspx>
3. Center for Behavioral Health Statistics and Quality. (2012). *Results from the 2011 National Survey on Drug Use and Health: Detailed tables*. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from <http://www.samhsa.gov/data/NSDUH/2011SummNatFindDetTables/Index.aspx>
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5. Center for Behavioral Health Statistics and Quality. (2012). *Treatment Episode Data Set (TEDS) 2000-2010: National admissions to substance abuse treatment services* (DASIS Series S-61, HHS Publication No. SMA 12-4701). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from <http://www.samhsa.gov/data/2k12/TEDS2010N/TEDS2010NWeb.pdf>
6. NSDUH is the Nation's primary source of information on the prevalence of illicit drug use among the civilian, noninstitutionalized population aged 12 or older, and it also provides estimates of alcohol and tobacco use and mental health problems. Begun in 1971 and conducted annually since 1990, NSDUH is sponsored by SAMHSA and collects data from a nationally representative sample of the population aged 12 or older. NSDUH data are collected through face-to-face, computer-assisted interviews at the respondent's place of residence. Items on sensitive topics such as drug use are self-administered to ensure privacy and promote accurate reporting.
7. TEDS is an annual compilation of data on the demographic characteristics and substance abuse problems of those admitted to substance abuse treatment, primarily at facilities that receive some public funding. TEDS records represent admissions rather than individuals because a person may be admitted to substance abuse treatment more than once during a single year. TEDS collected data on 1.8 million admissions aged 12 or older to substance abuse treatment facilities for 2010. Two States and one jurisdiction (Washington, Georgia, and the District of Columbia) either did not submit data or submitted less than a full calendar year of data for 2010. The TEDS information presented in this issue is based on data received through October 10, 2011.
8. N-SSATS is an annual survey of all known facilities, both public and private, in the United States that provide substance abuse treatment. N-SSATS is a point-prevalence survey with a reference date of the last weekday in March (e.g., March 31, 2010). This report presents estimates based on data from the 4,515 facilities that reported treating clients aged 17 or younger.
9. DAWN is a public health surveillance system that monitors drug-related morbidity and mortality. DAWN uses a probability sample of hospitals to produce estimates of drug-related emergency department (ED) visits for the United States and selected metropolitan areas annually. DAWN also produces annual profiles of drug-related deaths reviewed by medical examiners or coroners in selected metropolitan areas and States. Any ED visit related to recent drug use is included in DAWN. All types of drugs—licit and illicit—are covered. Alcohol involvement is documented for patients of all ages if it occurs with another drug. Alcohol is considered an illicit drug for minors and is documented even if no other drug is involved. The classification of drugs used in DAWN is derived from the *Multum Lexicon*, copyright 2012 Lexi-Comp, Inc., and/or Cerner Multum, Inc. The Multum Licensing Agreement governing use of the *Lexicon* can be found at <http://www.samhsa.gov/data/dawn/MultumLicenseAgreement.pdf>.
10. For NSDUH, the number of adolescents who used alcohol or illicit drugs "on an average day" is calculated by summing the weighted past month frequency of use (0 to 30 days) for each respective substance and dividing by 30. The number of adolescents who used alcohol, cigarettes, or illicit drugs for the first time in the past year "on an average day" is calculated by summing the weighted counts of respondents who both initiated substance use in the past year and were calculated to be between the ages of 12 and 17 at the time of first use and dividing by 365. The average number of cigarettes smoked or alcoholic drinks consumed per day in the past month among past month users is calculated using a weighted average or mean of the number of cigarettes or drinks reported by past month users. For TEDS, admission totals "on a typical day" were calculated by dividing the annual admission total by 365. For N-SSATS, "on a typical day" refers to the point-prevalence date of March 31, 2010. For DAWN, ED visits "on a typical day" were calculated by dividing the annual estimate of visits by 365.
11. For NSDUH, illicit drugs include marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, or prescription-type drugs used nonmedically. Nonmedical use is defined as the use of prescription-type drugs not prescribed for the respondent by a physician or used only for the experience or feeling they cause. Nonmedical use of any prescription-type pain reliever, sedative, stimulant, or tranquilizer does not include over-the-counter drugs. Nonmedical use of stimulants includes methamphetamine use.
12. The primary substance of abuse is the main substance reported at the time of admission.
13. The principal source of referral is the person or agency referring the client to the alcohol or drug abuse treatment program.
14. The number of active clients in treatment in the 2010 N-SSATS was defined as (1) hospital inpatient and residential (nonhospital) clients receiving substance abuse treatment services at the facility on March 31, 2010, and (2) outpatient clients who were seen at the facility for a substance abuse treatment or detoxification service at least once during the month of March 2010 and who were still enrolled in treatment as of March 31, 2010.
15. The balance primarily involved adverse reactions to and accidental ingestion of drugs.
16. Many ED visits involve multiple drugs. The sum of visits by drug will be greater than the total number of visits.

SUMMARY

Background: Adolescent substance use is a public health concern. In a given year, more than one quarter of adolescents drank alcohol; approximately one fifth used an illicit drug, and almost one eighth smoked cigarettes. **Methods:** This report collects data about adolescent substance use, including initiation, receipt of treatment, and emergency department visits for substance use "on an average or typical day." The data presented are from the 2010 and 2011 National Surveys on Drug Use and Health (NSDUHs), the 2010 Treatment Episode Data Set (TEDS), the 2010 National Survey of Substance Abuse Treatment Services (N-SSATS), and the 2011 Drug Abuse Warning Network (DAWN) Data in this report from NSDUH, TEDS, and DAWN are for adolescents aged 12 to 17; data from N-SSATS are for youths aged 17 or younger. **Results:** This report indicates that across all of the datasets used in this report, alcohol use emerges as a source of concern and drug use, particularly marijuana use, may also be areas of concern. Most Emergency Department results for adolescents are for marijuana and alcohol. The most common used drugs were cigarettes, marijuana, and alcohol. By far, the most common substance that adolescents received treatment for was marijuana (74.5% of all substances). **Conclusion:** Understanding the impact of substance use on adolescents on an average day underscores the impact of drugs and alcohol on America's youth. Policymakers can use this information to help inform their assessments of adolescent substance use treatment in their communities.

Key words: treatment, adolescents, substance use, National Survey on Drug Abuse and Health, NSDUH, Treatment Episode Data Set, TEDS, emergency department data, Drug Abuse Warning Network, DAWN, National Survey of Substance Abuse Treatment Services, N-SSATS

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KEYWORDS

Short Report, Emergency Department Data, Population Data, Researchers

The National Survey Drug Use and Health (NSDUH), the Treatment Episode Data Set (TEDS), the National Survey of Substance Abuse Treatment Services (N-SSATS), and the Drug Abuse Warning Network (DAWN) are four major data collections conducted by the Substance Abuse and Mental Health Services Administration's Center for Behavioral Health Statistics and Quality (SAMHSA/CBHSQ).

NSDUH is an annual survey that collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their place of residence. The combined 2010 and 2011 past year use data for this report are based on information obtained from 45,500 persons aged 12 to 17. Data related to past year substance initiation between the ages of 12 and 17 are based on information obtained from 51,800 persons aged 12 to 18.

TEDS data are collected through State administrative systems and then are submitted to SAMHSA. They include information on admissions to substance abuse treatment primarily from facilities that receive some public funding. The 2010 TEDS data presented in this report are based on data received through October 10, 2011, and include data from 132,850 admissions aged 12 to 17.

Trained DAWN staff reviewed medical records (charts) of emergency department (ED) visits on an ongoing basis at a nationally representative sample of hospitals to find drug-related ED visits that met the DAWN case criteria. The estimates presented in this report were based on the 11,933 drug-related visits made by patients aged 12 to 17 found through a review of 7 million charts for ED visits occurring in calendar year 2011 in 233 hospitals.

N-SSATS is an annual census of all known substance abuse treatment facilities in the United States. On the survey reference date of March 31, 2010, there were 81,863 clients aged 17 or younger in 4,515 facilities. Facilities responded to the survey via mail, Internet, or telephone.

For more information, see the following publications:

Center for Behavioral Health Statistics and Quality. (2013). Results from the 2012 National Survey on Drug Use and Health: Summary of national findings (HHS Publication No. SMA 12-4795, NSDUH Series H-46). Rockville, MD: Substance Abuse and Mental Health Services Administration. Also Available online : <http://www.samhsa.gov/data/population-data-nsduh>

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Center for Behavioral Health Statistics and Quality. (2011). National Survey of Substance Abuse Treatment Services: 2010. Data on substance abuse treatment facilities. (DASIS Series S-59, HHS Publication No. SMA 11-4665). Rockville, MD: Substance Abuse and Mental Health Services Administration <http://www.samhsa.gov/data/substance-abuse-facilities-data-nssats>

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The CBHSQ Report is prepared by the Center for Behavioral Health Statistics and Quality (CBHSQ), SAMHSA, and by RTI International in Research Triangle Park, North Carolina. (RTI International is a trade name of Research Triangle Institute.)

Other substance abuse reports:
<http://www.samhsa.gov/data>